EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	46	fluorocyclopropanecarboxylic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 08:58
L2	56340	$borohydride	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 08:39
L3	1	L1 AND L2	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 08:39
L4	1102	(560/124).CCLS.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/07/24 08:59
L6	75	l2 and l4	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 08:59
L7	6476	dehalogen$	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 09:00
L8	2	l6 and l7	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 09:31
L9	8	"9504712"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 09:38
L10	0	("200600525623").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/07/24 09:38
L11	0	("20060525623").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/07/24 09:38
L12	0	("2006000525623").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/07/24 09:39

EAST Search History

L13	0	("200600052623").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/07/24 09:39
L14	2	("20060052623").PN.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2007/07/24 10:57
L17	39750	sodium adj borohydride	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:23
L18	66473	dimethylsulfoxide	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 10:59
L19	552	l17 same l18	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 10:59
L20	48118	dimethylacetamide	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 10:59
L21	52	l19 same l20	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:05
L22	7456	dehalogenation or dechlorination	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:00
L23	0	l21 same l22	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:00
L24	27	"326934"	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:11
L25	112280	DMSO	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:11
L26	1937	DMPU	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:11

EAST Search History

L27	95999	DMF	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:11
L28	160341	l25 or l26 or l27	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:12
L29	2327	l17 same l28	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:12
L30	144	l17 near5 l28	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:16
L31	0	l22 and l30	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:16
L32	17	l22 and l29	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:18
L33	20	polar adj aproptic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:20
L34	29	polar near5 aproptic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:20
L35	40	$polar near5 aproptic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:21
L36	9	l2 and l35	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:21
L37	47683	borohydride	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:24
L38	22369	l28 and l37	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:24

EAST Search History

L39	389	l28 near20 l37	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:24
L40	310	l28 near10 l37	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:25
L41	161	l28 near5 l37	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2007/07/24 11:25

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NEWS 6	MAR 30	RDISCLOSURE reloaded with enhancements
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NEWS 10	APR 30	CA/CAplus enhanced with 1870-1889 U.S. patent records
NEWS 11	APR 30	INPADOC replaced by INPADOCDB on STN
NEWS 12	MAY 01	New CAS web site launched
NEWS 13	MAY 08	CA/CAplus Indian patent publication number format defined
NEWS 14	MAY 14	RDISCLOSURE on STN Easy enhanced with new search and display fields
NEWS 15	MAY 21	BIOSIS reloaded and enhanced with archival data
NEWS 16	MAY 21	TOXCENTER enhanced with BIOSIS reload
NEWS 17	MAY 21	CA/CAplus enhanced with additional kind codes for German patents
NEWS 18	MAY 22	CA/CAplus enhanced with IPC reclassification in Japanese patents
NEWS 19	JUN 27	CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS 20	JUN 29	STN Viewer now available
NEWS 21	JUN 29	STN Express, Version 8.2, now available
NEWS 22	JUL 02	LEMBASE coverage updated
NEWS 23	JUL 02	LMEDLINE coverage updated
NEWS 24	JUL 02	SCISEARCH enhanced with complete author names
NEWS 25	JUL 02	CHEMCATS accession numbers revised
NEWS 26	JUL 02	CA/CAplus enhanced with utility model patents from China
NEWS 27	JUL 16	CAplus enhanced with French and German abstracts
NEWS 28	JUL 18	CA/CAplus patent coverage enhanced

NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

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NEWS IPC8	For general information regarding STN implementation of IPC 8

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=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

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FILE LAST UPDATED: 23 Jul 2007  (20070723/ED)

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=> fluorocyclopropanecarboxylate
            25 FLUOROCYCLOPROPANECARBOXYLATE
             7 FLUOROCYCLOPROPANECARBOXYLATES
L1          27 FLUOROCYCLOPROPANECARBOXYLATE
                (FLUOROCYCLOPROPANECARBOXYLATE OR FLUOROCYCLOPROPANECARBOXYLAT
                ES)

=> ?borohydride
L2       25049 ?BOROHYDRIDE

=> l1 and l2
L3           2 L1 AND L2

=> d l3 1-2 ti fbib abs

L3   ANSWER 1 OF 2  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Preparation of 1,2-cis-2-fluorocyclopropane-1-carboxylate esters as
     intermediates for quinolone antibacterial agents
AN   2005:1261766  CAPLUS
DN   144:6523
TI   Preparation of 1,2-cis-2-fluorocyclopropane-1-carboxylate esters as
     intermediates for quinolone antibacterial agents
IN   Sato, Koji; Imai, Makoto
PA   Daiichi Seiyaku Co., Ltd., Japan
SO   Jpn. Kokai Tokkyo Koho, 9 pp.
     CODEN: JKXXAF
DT   Patent
LA   Japanese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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PI   JP 2005330235        A     20051202    JP 2004-150618         20040520
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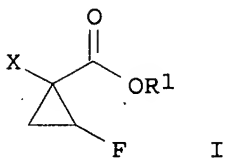
JP 2004-150618 20040520

OS MARPAT 144:6523
GI



I

AB Title esters I (X = H; R1 = C1-8 alkyl, C6-12 aryl, C2-8 alkenyl, c7-26 aralkyl) are prepared by reduction of I (X = Cl, Br, iodine; R1 = same as above)
with M1BHmR2n or M2(BHmR2n)2 (M1 = alkali metal; M2 = alkaline earth metal, Zn; R2 = H, cyano, C1-8 acyloxy, C1-6 alkoxy; m = 1-4; n = 0-3; m + n = 4) in the presence of sulfoxides and Lewis acids chosen from halides or triflates of Mg, Al, Sc, Ti, Cr, Mn, Fe, Co, Ni, Cu, Zn, Ga, Ge, Y, Zr, Ag, Cd, In, Sn, Sb, Hf, Pb, Bi, La, Ce, or Yb. Thus, tert-Bu 1-chloro-2-fluorocyclopropane-1-carboxylate (cis/trans = 62/38) was treated with InCl3 and NaBH4 at 50° in DMSO for 40 h to give 78% tert-Bu 2-fluorocyclopropane-1-carboxylate (cis/trans = 92/8).

L3 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of 2-fluorocyclopropane-1-carboxylic esters by reductive dehalogenation
AN 2004:589525 CAPLUS
DN 141:123417
TI Preparation of 2-fluorocyclopropane-1-carboxylic esters by reductive dehalogenation
IN Tani, Yuichiro; Nakayama, Keiji; Sakuratani, Kenji; Sato, Koji
PA Daiichi Pharmaceutical Co., Ltd., Japan
SO PCT Int. Appl., 18 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004060851	A1	20040722	WO 2004-JP18	20040107
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ				
				JP 2003-1300	A 20030107
	EP 1582513	A1	20051005	EP 2004-700528	20040107
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
				JP 2003-1300	A 20030107
				WO 2004-JP18	W 20040107
	CN 1723188	A	20060118	CN 2004-80001834	20040107
				JP 2003-1300	A 20030107
	IN 2005DN02514	A	20061229	IN 2005-DN2514	20050610
				JP 2003-1300	A 20030107
				WO 2004-JP18	W 20040107
	NO 2005003208	A	20050721	NO 2005-3208	20050630
				JP 2003-1300	A 20030107
				WO 2004-JP18	W 20040107
	US 2006052626	A1	20060309	US 2005-541204	20050705
	US 7199260	B2	20070403		
				JP 2003-1300	A 20030107
				WO 2004-JP18	W 20040107

OS CASREACT 141:123417; MARPAT 141:123417
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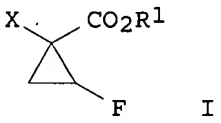

I

AB Title compds. are prepared by reaction of cycloproanes I (X = chloro, bromo, iodo; R1 = alkyl, aryl, alkenyl, aralkyl) with a reducing agents in the presence of a phase transfer catalyst. Thus, reaction of I (R1 = tert-Bu, X = Cl) (mixture of cis and trans isomers) with NaBH4 in MeOBu-t in the presence of Bu4NBr at 40° for 20 h gave 53% tert-Bu 2-fluorocyclopropane-1-carboxylate (cis/trans = 95/5).

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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	11.09	11.30
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.56	-1.56

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FULL ESTIMATED COST	11.09	11.30
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.56	-1.56

=> d his

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FILE 'CAPLUS' ENTERED AT 09:16:19 ON 24 JUL 2007
L1 27 FLUOROCYCLOPROPANECARBOXYLATE
L2 25049 ?BOROHYDRIDE
L3 2 L1 AND L2

=> dimethylsulfoxide
8185 DIMETHYLSULFOXIDE

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            14 DIMETHYLSULFOXIDES
L4        8192 DIMETHYLSULFOXIDE
                  (DIMETHYLSULFOXIDE OR DIMETHYLSULFOXIDES)

=> dimethylacetamide
         11725 DIMETHYLACETAMIDE
            19 DIMETHYLACETAMIDES
L5       11733 DIMETHYLACETAMIDE
                  (DIMETHYLACETAMIDE OR DIMETHYLACETAMIDES)

=> l2(l)l4
L6          15 L2(L)L4

=> l6(l)l5
L7           0 L6(L)L5

=> d l6 1-15 ti

L6   ANSWER 1 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Synthesis of novel pyridazine nucleosides

L6   ANSWER 2 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Amino acid analysis: reduction of ninhydrin by sodium borohydride

L6   ANSWER 3 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   A new technique for sampling and analysis of atmospheric dimethylsulfoxide
     (DMSO)

L6   ANSWER 4 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Use of sensitized luminescence of lanthanides in analysis of drugs

L6   ANSWER 5 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Molecular weight distribution and (1→3)(1→4)-β-D-glucan
     content of consecutive extracts of various oat and barley cultivars

L6   ANSWER 6 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Chemistry of muconaldehydes of possible relevance to the toxicology of
     benzene

L6   ANSWER 7 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Serglycin and betaglycan proteoglycans are expressed in the megakaryocytic
     cell line CHRF 288-11 and normal human megakaryocytes

L6   ANSWER 8 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   A new procedure for the reduction of uronic acid containing
     polysaccharides

L6   ANSWER 9 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Preparation of fluorocyclopropanecarboxylic acid derivatives as
     intermediates for quinolone bactericides

L6   ANSWER 10 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Synthesis of deuterated cyclopropene fatty esters structurally related to
     palmitic and myristic acids

L6   ANSWER 11 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Reductions by alkali metal borohydrides and alkylhalosilanes in the
     presence of a complexing solvent

L6   ANSWER 12 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Lithium borohydride (sodium borohydride)-chlorotrimethylsilane, an
     unusually strong and versatile reducing agent

L6   ANSWER 13 OF 15  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   A process for the preparation of ticlopidine
```

L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
TI Optimization of erythrocyte membrane glycoprotein fluorescent labeling with dansylhydrazine after polyacrylamide gel electrophoresis

L6 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
TI N-Monomethylation of aromatic primary amines

=> d l6 11 ti fbib abs

L6 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
TI Reductions by alkali metal borohydrides and alkylhalosilanes in the presence of a complexing solvent
AN 1990:54477 CAPLUS
DN 112:54477
TI Reductions by alkali metal borohydrides and alkylhalosilanes in the presence of a complexing solvent
IN Sandhoff, Konrad; Giannis, Athanassios; Steglich, Wolfgang
PA BASF A.-G., Fed. Rep. Ger.
SO Ger. Offen., 7 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 3802981	A1	19890810	DE 1988-3802981	19880202
EP 326934	A1	19890809	EP 1989-101310	19890126
EP 326934	B1	19911030		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
			DE 1988-3802981 A	19880202

OS CASREACT 112:54477; MARPAT 112:54477
AB A variety of organic functional groups are reduced by alkali metal borohydrides and alkylhalosilanes RnSiX4-n (R = C1-4 alkyl; X = Cl, Br; n = 1-3) in the presence of a complexing solvent. The system acts as a source of solvent-complexes BH3. Thus, reduction of 3,4-(MeO)2C6H3CH2CN by NaBH4 and Me3SiCl in refluxing THF for 10 h (evolution of Me3SiH), followed by methanolytic workup and acid extraction, gave 90% 3,4-(MeO)2C6H3CH2CH2NH2. Products expected for BH3 redns. of 15 compds. were obtained with typical yields of 70-95%.

=> l2(l)l5
L8 18 L2(L)L5

=> d l8 1-18 ti

L8 ANSWER 1 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Investigations of different chemoselectivities in primary, secondary and tertiary amide reactions with sodium borohydride

L8 ANSWER 2 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Titanium-mediated living radical styrene polymerizations. V. Cp2TiCl-catalyzed initiation by epoxide radical ring opening: effect of solvents and additives

L8 ANSWER 3 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Structure-property relationships for novel wholly aromatic polyamide-hydrazides containing various proportions of para-phenylene and meta-phenylene units. IV. Preparation and characterization of metallized plastic films through transition metal complexation

L8 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of azole compounds as protein tyrosine phosphatase 1B

inhibitors

L8 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Process and intermediates for preparing retroviral protease inhibitors

L8 ANSWER 6 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Process and intermediates for preparing retroviral protease inhibitors

L8 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Sodium borohydride reactivity with different solvents

L8 ANSWER 8 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI 1-(3,4-Dihydro-2H-1-benzopyran-4-yl)-1,4-diazacycloheptane compounds, processes for their preparation, and their use in treating neurological disorders

L8 ANSWER 9 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI A new synthesis of occidol

L8 ANSWER 10 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Synthesis and reduction of azidodeox derivatives of chitin

L8 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation and characterization of metalized polymer films formed from poly[4-(terephthaloylamino) salicylic acid hydrazide]-metal chelates

L8 ANSWER 12 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Reducing characteristics of borohydride exchange resin-CuSO4 in methanol

L8 ANSWER 13 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Synthesis of telechelic oligostyrenes by the ozonolysis of poly(styrene-stat-butadiene): protection of styrene units against ozone attack by the use of Di-N-alkyl amides as sacrificial ozone scavengers

L8 ANSWER 14 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Titanium catalyzed reduction of aromatic halides by sodium borohydride

L8 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI The Mechanism of Titanium Complex-Catalyzed Reduction of Aryl Halides by Sodium Borohydride Is Strongly Solvent Dependent

L8 ANSWER 16 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of bis(4-aminophenyl)trimethine dyes by reduction of 1,3-diphenyl-2-propen-1-ones and dehydration

L8 ANSWER 17 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI A novel highly selective reduction of tertiary amides to amines with sodium borohydride-bis(2-bromoethyl)selenium dibromide

L8 ANSWER 18 OF 18 CAPLUS COPYRIGHT 2007 ACS on STN
TI Catalytic properties of a nickel(II) chloride-dimethylacetamide complex reduced with sodium tetrahydroborate in hydrogenation and isomerization of unsaturated compounds

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	34.80	35.01
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.34	-2.34

SESSION WILL BE HELD FOR 120 MINUTES

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FILE 'CAPLUS' ENTERED AT 11:38:14 ON 24 JUL 2007
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FULL ESTIMATED COST                               34.80      35.01

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)    SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                               -2.34      -2.34

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L2         25049 ?BOROHYDRIDE
L3             2 L1 AND L2
L4          8192 DIMETHYLSULFOXIDE
L5         11733 DIMETHYLACETAMIDE
L6            15 L2(L)L4
L7             0 L6(L)L5
L8            18 L2(L)L5

=> DMSO or DMPU or DMF or NMP or DMAC
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              3 DMSOS
          49591 DMSO
                (DMSO OR DMSOS)
            300 DMPU
          90900 DMF
            130 DMFS
          90990 DMF
                (DMF OR DMFS)
           5270 NMP
            107 NMPS
           5325 NMP
                (NMP OR NMPS)
           1747 DMAC
             10 DMACS
           1757 DMAC
                (DMAC OR DMACS)
L9       138664 DMSO OR DMPU OR DMF OR NMP OR DMAC

=> l2 (l)l9
L10          246 L2 (L)L9

=> dehalo?
L11         9241 DEHALO?
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=> l10 and l11
L12 6 L10 AND L11

=> d l12 1-6 ti

L12 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
TI Method for preparation of valiolamine from halogenated valiolamine cyclic carbamate

L12 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
TI A New Method of Determining Chlorine Kinetic Isotope Effects

L12 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
TI F430 Model Chemistry. An Investigation of Nickel Complexes as Catalysts for the Reduction of Alkyl Halides and Methyl Coenzyme-M by Sodium Borohydride

L12 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
TI Titanium catalyzed reduction of aromatic halides by sodium borohydride

L12 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of fluorocyclopropanecarboxylic acid derivatives as intermediates for quinolone bactericides

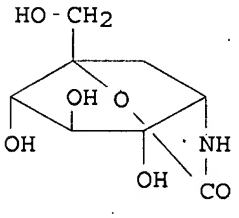
L12 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
TI Reductive defluorination of (trifluoromethyl)cobamides

=> d l12 1 ti fbib abs

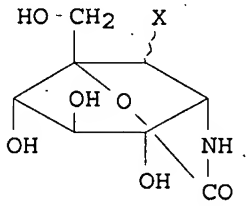
L12 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2007 ACS on STN
TI Method for preparation of valiolamine from halogenated valiolamine cyclic carbamate
AN 2006:910674 CAPLUS
DN 145:293292
TI Method for preparation of valiolamine from halogenated valiolamine cyclic carbamate
IN George, Wanyoike Ng Ang A.; Kurashima, Katsumi; Sasaki, Hironori
PA Tokuyama Corp., Japan; Godo Shusei Co., Ltd.
SO Jpn. Kokai Tokkyo Koho, 13pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006232688	A	20060907	JP 2005-46369	20050223
			JP 2005-46369	20050223

OS CASREACT 145:293292; MARPAT 145:293292
GI



I



II

AB In a method for preparation of valiolamine, a key intermediate for voglibose, using valienamine as the starting material, processes for purification of

intermediates and the final product are simplified to efficiently obtain the desired product. The process comprises hydrolysis of cyclic carbamate (I) and purification of crude valiolamine by crystallization using lower alcs. such as Et acetate and methanol as crystallization solvent to obtain valienamine of high purity. The crude cyclic carbamate I is prepared by reductive dehalogenation of halogenated cyclic carbamate (II; X = halo) and purified by crystallization using lower alcs. such as Et acetate and methanol as crystallization solvent to obtain of crude halogenated cyclic carbamate II of high purity. Reaction of valiolamine with dihydroxyacetone gives voglibose, α-glucosidase inhibitor and antidiabetic agent. Thus, NaBH4 (17.2 g) was slowly added to a cooled (5°) solution of 6.5 g II (X = Br) in 77 g ion exchanged water under ice-cooling and the resulting mixture was allowed to react for 4 h, neutralized by adding 2.6 g acetic acid, and concentrated under reduce pressure to give a 26 g solution of crude cyclic carbamate I. Methanol (30 g) was added to the solution (13 g) and insol. matter was removed by filtration. Et acetate (30 g) was added to the filtrate and stirred at 25° for 3 h for crystallization, followed by filtration and drying to give 1.85 g cyclic carbamate I (95% purity) in 78% yield. The cyclic carbamate I (3.7 g) was dissolved in 100 g ion exchanged water, warmed to 35°, and treated with 26.6 g Ba(OH)2.8H2O, and the resulting mixture was heated at 80° for 5 h, cooled, neutralized by bubbling CO2, filtered, and concentrated to give 3.9 g crude valiolamine. The crude valiolamine (1.95 g) was dissolved in 25 g methanol and filtered to remove insol. matter. The filtrate was treated with 50 g Et acetate and stirred at 25° for 3 h, followed by filtration and drying to give 1.32 g valiolamine (98% purity) in 81% yield. Valiolamine (4.0 g) was dissolved in DMF, treated with 13.1 g dihydroxyacetone, 3.0 mL concentrated aqueous HCl solution, 5.5 g sodium cyanoborohydride, and the resulting mixture was stirred at 70° for 24 h to give, after workup, purification by column chromatog. using Dowex 50W X 8, and freeze-drying, 3.2 g voglibose.

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=> d his

     (FILE 'HOME' ENTERED AT 09:16:08 ON 24 JUL 2007)

     FILE 'CAPLUS' ENTERED AT 09:16:19 ON 24 JUL 2007
L1            27 FLUOROCYCLOPROPANECARBOXYLATE
L2         25049 ?BOROHYDRIDE
L3             2 L1 AND L2
L4          8192 DIMETHYLSULFOXIDE
L5         11733 DIMETHYLACETAMIDE
L6            15 L2(L)L4
L7             0 L6(L)L5
L8            18 L2(L)L5
L9        138664 DMSO OR DMPU OR DMF OR NMP OR DMAC
L10          246 L2 (L)L9
L11         9241 DEHALO?
L12            6 L10 AND L11

=> dipolar or polar\
          35618 DIPOLAR
              5 DIPOLARS
          35618 DIPOLAR
                  (DIPOLAR OR DIPOLARS)
         153053 POLAR
            468 POLARS
         153336 POLAR\
                  (POLAR OR POLARS)
L13      186897 DIPOLAR OR POLAR\
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=> dipolar or polar
         35618 DIPOLAR
             5 DIPOLARS
         35618 DIPOLAR
                 (DIPOLAR OR DIPOLARS)
        153053 POLAR
           468 POLARS
        153336 POLAR
                 (POLAR OR POLARS)
L14     186897 DIPOLAR OR POLAR

=> aprotic
         15321 APROTIC
             8 APROTICS
L15      15325 APROTIC
                 (APROTIC OR APROTICS)

=> l14(l)l15
L16       5732 L14(L)L15

=> l2 (l) l16
L17          9 L2 (L) L16

=> d l17 1-9 ti

L17  ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Simple method for preparing N,N-dimethyl-3-aryl-3-hydroxypropylamine

L17  ANSWER 2 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Merits of sodium borohydride reductions under phase transfer catalysis -
     part I

L17  ANSWER 3 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Synthesis and reduction of azidodeox derivatives of chitin

L17  ANSWER 4 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Modified borohydride chemistries.

L17  ANSWER 5 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   High-molecular-weight tough poly(arylene thioethers) and preparation
     methods therefor

L17  ANSWER 6 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Process for producing 2-aryl- or 2-arylalkyl-1,2-ethanediol derivatives by
     reduction of α-hydroxy acid esters

L17  ANSWER 7 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Process for preparing alkaline aminoborohydrides and alkaline
     aminoborohydride complexes

L17  ANSWER 8 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Reduction method

L17  ANSWER 9 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Nucleophilic borohydride:  selective reductive displacement of
     halides, sulfonate esters, tertiary amines, and N,N-disulfonimides with
     borohydride reagents in polar aprotic solvents


=> d l17 8 ti fbib abs

L17  ANSWER 8 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Reduction method
AN   1980:198097  CAPLUS
```

DN 92:198097
TI Reduction method
IN Iwakuma, Takeo; Yamada, Koichiro
PA Tanabe Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 54154722	A	19791206	JP 1978-63458	19780526
				JP 1978-63458 A	19780526

AB RMe [R = 4-(un)substituted-2-hydroxyphenyl, hydroxynaphthyl, etc.] were prepared by reductive deamination of RCH2N+R1Me2.X- (R1 = monovalent organic groups; X- = anions) with Na cyanoborohydride (I) in aprotic polar solvents. Thus, stirring 589 mg 2,4-Me2NCH2(O2N)C6H3OH (II) in THF with Me2SO4 3.5 h at room temperature gave II methosulfate, which was stirred with 753 mg I in (Me2N)3PO 12 h at 70° to give 412 mg 4-nitro-o-cresol. Also, α-methyl-β-naphthol, scatole, 1-1-(3,4,5-trimethoxybenzyl)-2-benzyloxycarbonyl-5-methyl-6,7-dihydroxy-1,2,3,4-tetrahydroisoquinoline, o-cresol, 4-chloro-o-cresol, 4-ethoxycarbonyl-o-cresol, and 4-cyanomethyl-o-cresol were prepared from the corresponding dimethylaminomethyl derivs.

=> d l17 9 ti fbib abs

L17 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
TI Nucleophilic borohydride: selective reductive displacement of halides, sulfonate esters, tertiary amines, and N,N-disulfonimides with borohydride reagents in polar aprotic solvents
AN 1978:405821 CAPLUS
DN 89:5821
TI Nucleophilic borohydride: selective reductive displacement of halides, sulfonate esters, tertiary amines, and N,N-disulfonimides with borohydride reagents in polar aprotic solvents
AU Hutchins, Robert O.; Kandasamy, Duraisamy; Dux, Frank, III; Maryanoff, Cynthia A.; Rotstein, David; Goldsmith, Barry; Burgoyne, William; Cistone, Frank; Dalessandro, Joseph; Puglis, Joseph
CS Dep. Chem., Drexel Univ., Philadelphia, PA, USA
SO Journal of Organic Chemistry (1978), 43(11), 2259-67
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
AB Sodium borohydride in polar aprotic solvents [P(O)(NMe2)3, Me2SO, sulfolane] was an effective source of nucleophilic hydride for the reductive displacement of primary and secondary alkyl halides, sulfonate esters, tertiary amines, and disulfonimides. This is a method for reductive deamination of amines. The mildness of borohydride allowed a number of chemoselective transformations without damage to groups normally affected by harsher reagents such as LiAlH4 (i.e., CO2R, CO2H, CN, NO2).

=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	81.78	81.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-4.68	-4.68

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 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:52:20 ON 24 JUL 2007

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

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 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 11:59:53 ON 24 JUL 2007
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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FULL ESTIMATED COST                                    81.78      81.99

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                    -4.68      -4.68

=> d his

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     FILE 'CAPLUS' ENTERED AT 09:16:19 ON 24 JUL 2007
L1            27 FLUOROCYCLOPROPANECARBOXYLATE
L2         25049 ?BOROHYDRIDE
L3             2 L1 AND L2
L4          8192 DIMETHYLSULFOXIDE
L5         11733 DIMETHYLACETAMIDE
L6            15 L2(L)L4
L7             0 L6(L)L5
L8            18 L2(L)L5
L9        138664 DMSO OR DMPU OR DMF OR NMP OR DMAC
L10          246 L2 (L)L9
L11         9241 DEHALO?
L12            6 L10 AND L11
L13       186897 DIPOLAR OR POLAR\
L14       186897 DIPOLAR OR POLAR
L15        15325 APROTIC
L16         5732 L14(L)L15
L17            9 L2 (L) L16

=> d l17 1-9 ti

L17  ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Simple method for preparing N,N-dimethyl-3-aryl-3-hydroxypropylamine

L17  ANSWER 2 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Merits of sodium borohydride reductions under phase transfer catalysis -
     part I

L17  ANSWER 3 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Synthesis and reduction of azidodeox derivatives of chitin

L17  ANSWER 4 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
TI   Modified borohydride chemistries.

L17  ANSWER 5 OF 9  CAPLUS  COPYRIGHT 2007 ACS on STN
```

TI High-molecular-weight tough poly(arylene thioethers) and preparation methods therefor

L17 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
TI Process for producing 2-aryl- or 2-arylalkyl-1,2-ethanediol derivatives by reduction of α-hydroxy acid esters

L17 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
TI Process for preparing alkaline aminoborohydrides and alkaline aminoborohydride complexes

L17 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
TI Reduction method

L17 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
TI Nucleophilic borohydride: selective reductive displacement of halides, sulfonate esters, tertiary amines, and N,N-disulfonimides with borohydride reagents in polar aprotic solvents

=> d l17 2.4,8 ti fbib abs
'2.4' IS NOT A VALID FORMAT FOR FILE 'CAPLUS'

The following are valid formats:

ABS --------- GI and AB
ALL --------- BIB, AB, IND, RE
APPS -------- AI, PRAI
BIB --------- AN, plus Bibliographic Data and PI table (default)
CAN --------- List of CA abstract numbers without answer numbers
CBIB -------- AN, plus Compressed Bibliographic Data
CLASS ------- IPC, NCL, ECLA, FTERM
DALL -------- ALL, delimited (end of each field identified)
DMAX -------- MAX, delimited for post-processing
FAM --------- AN, PI and PRAI in table, plus Patent Family data
FBIB -------- AN, BIB, plus Patent FAM
IND --------- Indexing data
IPC --------- International Patent Classifications
MAX --------- ALL, plus Patent FAM, RE
PATS -------- PI, SO
SAM --------- CC, SX, TI, ST, IT
SCAN -------- CC, SX, TI, ST, IT (random display, no answer numbers; SCAN must be entered on the same line as the DISPLAY, e.g., D SCAN or DISPLAY SCAN)
STD --------- BIB, CLASS

IABS -------- ABS, indented with text labels
IALL -------- ALL, indented with text labels
IBIB -------- BIB, indented with text labels
IMAX -------- MAX, indented with text labels
ISTD -------- STD, indented with text labels

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

HIT --------- Fields containing hit terms
HITIND ------ IC, ICA, ICI, NCL, CC and index field (ST and IT) containing hit terms
HITRN ------- HIT RN and its text modification
HITSTR ------ HIT RN, its text modification, its CA index name, and its structure diagram
HITSEQ ------ HIT RN, its text modification, its CA index name, its

structure diagram, plus NTE and SEQ fields
FHITSTR ----- First HIT RN, its text modification, its CA index name, and its structure diagram
FHITSEQ ----- First HIT RN, its text modification, its CA index name, its structure diagram, plus NTE and SEQ fields
KWIC -------- Hit term plus 20 words on either side
OCC --------- Number of occurrence of hit term and field in which it occurs

To display a particular field or fields, enter the display field codes. For a list of the display field codes, enter HELP DFIELDS at an arrow prompt (=>). Examples of formats include: TI; TI,AU; BIB,ST; TI,IND; TI,SO. You may specify the format fields in any order and the information will be displayed in the same order as the format specification.

All of the formats (except for SAM, SCAN, HIT, HITIND, HITRN, HITSTR, FHITSTR, HITSEQ, FHITSEQ, KWIC, and OCC) may be used with DISPLAY ACC to view a specified Accession Number.
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L17 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
TI Merits of sodium borohydride reductions under phase transfer catalysis - part I
AN 2000:572767 CAPLUS
DN 134:90953
TI Merits of sodium borohydride reductions under phase transfer catalysis - part I
AU Yadav, Vasanti G.; Yadav, G. D.; Vyas, J. R.
CS Dishman Pharmaceuticals and Chemicals Ltd., Mumbai, 400059, India
SO Chimica Oggi (2000), 18(6), 39-44
CODEN: CHOGDS; ISSN: 0392-839X
PB TeknoScienze
DT Journal; General Review
LA English
AB Many organic transformations in pharmaceutical and agrochem. industries involve mols. containing multifunctional group, which need to be selectively hydrogenated by using a suitable hydrogen source. In this respect sodium borohydride is found to be highly desirable in comparison with other reducing agent as it is mild and a more selective catalyst. Sodium borohydride selectively reduces functional groups such as aldehydes, ketones, acid chloride and imines in presence of esters, epoxides, amides, nitriles and nitro group. Sodium borohydride redns. are generally conducted in solvents such as methanol or ethanol due to its high solubility in them. However, the efficiency of sodium borohydride in these solvents is very poor due to the high rate of decomposition Conducting the reaction in two phases using non-polar aprotic solvents such as hydrocarbons and a phase transfer catalyst can alleviate this problem. In hydrocarbon solvents sodium borohydride is stable and does not undergo decomposition reaction and thus its complete utilization can be realized. For the reduction of functional groups such as nitro, ester, amide etc., the reducing power of sodium borohydride can be varied over a wide range by mixing the sodium borohydride with metal salts such as LiCl, AlCl3, CoCl2, MgCl2, TiCl4, BF3, I2, thiols such as ethanethiol, carboxylic acid such as acetic acid, trifluoroacetic acid and quaternary ammonium salts. This review with 18 refs. is published in two parts. Part I delineates the prowess of sodium borohydride redns. under phase transfer catalysis and in situ synthesis of quaternary ammonium borohydrides. Part II will deal with redns. using preformed quaternary ammonium salts and effect of solvents in sodium borohydride reduction
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
TI Modified borohydride chemistries.
AN 1998:528781 CAPLUS
TI Modified borohydride chemistries.
AU Cook, Michael M.
CS Morton International, Andover, MA, 01845, USA
SO Book of Abstracts, 216th ACS National Meeting, Boston, August 23-27 (1998), I&EC-072 Publisher: American Chemical Society, Washington, D. C. CODEN: 66KYA2
DT Conference; Meeting Abstract
LA English
AB Sodium and potassium borohydrides are unique chems. in several ways. These hydrides are sufficiently solvolytically stable that they are used extensively in aqueous and alc. solvents (as well as in aprotic polar solvents) and they are extremely thermally stable. Com., these products offer the lowest hydride equivalent costs of any available hydride and are safely utilized in chemical productions, generally with min. addnl. capital costs. This presentation will review several approaches to modify and broaden the utility of sodium borohydride; thereby extending the chemistries into other important areas. These modifications focus on: (a) in situ methods to enhance reactivity to change reactivity to a more electrophilic hydride (b) use of phase transfer catalysis; (c) enhanced chemo-, stereo-, regio- and enantioselectivities; (d) novel new methods to reduce specific target groups. This presentation also encompasses practical suggestions for com. utilization of sodium borohydride.

L17 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2007 ACS on STN
TI Reduction method
AN 1980:198097 CAPLUS
DN 92:198097
TI Reduction method
IN Iwakuma, Takeo; Yamada, Koichiro
PA Tanabe Seiyaku Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 54154722	A	19791206	JP 1978-63458	19780526
				JP 1978-63458 A	19780526

AB RMe [R = 4-(un)substituted-2-hydroxyphenyl, hydroxynaphthyl, etc.] were prepared by reductive deamination of RCH2N+R1Me2.X- (R1 = monovalent organic groups; X- = anions) with Na cyanoborohydride (I) in aprotic polar solvents. Thus, stirring 589 mg 2,4-Me2NCH2(O2N)C6H3OH (II) in THF with Me2SO4 3.5 h at room temperature gave
II
methosulfate, which was stirred with 753 mg I in (Me2N)3PO 12 h at 70° to give 412 mg 4-nitro-o-cresol. Also, α-methyl-β-naphthol, scatole, 1-1-(3,4,5-trimethoxybenzyl)-2-benzyloxycarbonyl-5-methyl-6,7-dihydroxy-1,2,3,4-tetrahydroisoquinoline, o-cresol, 4-chloro-o-cresol, 4-ethoxycarbonyl-o-cresol, and 4-cyanomethyl-o-cresol were prepared from the corresponding dimethylaminomethyl derivs.

=>
=> logoff hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	107.43	107.64

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION

CA SUBSCRIBER PRICE -7.02 -7.02

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:17:43 ON 24 JUL 2007